IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	CLARK ET AL.	Examiner:	H. BUI
Serial No.:	10/714,583	Group Art Unit:	2841
Filed:	NOVEMBER 13, 2003	Docket No.:	2316.1816US01
Title:	MODULE WITH INTERCHANGEABLE CARD		

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 14, 2008.

By: Carla J. Catalano
Name: Carla J. Catalano

AMENDMENT AND RESPONSE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action mailed November 14, 2007, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims that begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

In the Claims

Please amend claims 1, 3, 8, and 13 as shown. Applicants reserve the right to pursue the original subject matter in a continuing application.

1. **(Currently Amended)** A patch panel module, comprising:

a) a one-piece housing having a generally L-shaped construction, the L-shaped construction of the one-piece housing ~~including~~ being defined by a face plate and a housing side, the face plate having a front opening; and

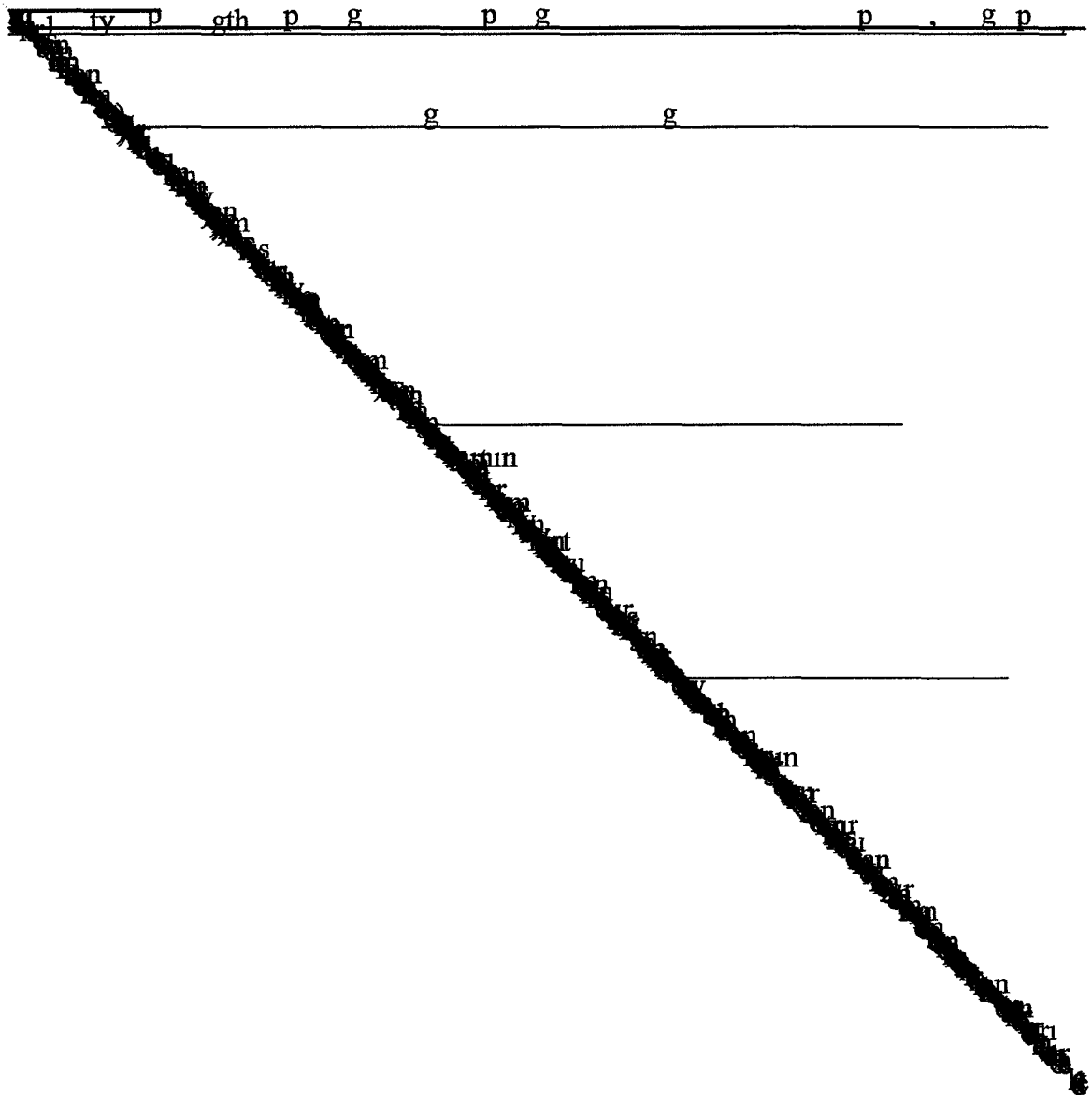
b) a module card having a length that extends between a front end of the module card and a rear end, the module card being attached to the housing by a snap-fit connection, the module card including a front connector positioned at the front end of the module card adjacent to the front opening of the housing, and a rear connector ~~located~~ positioned at ~~an~~ the rear end of the module card ~~opposite the front connector;~~

c) wherein the housing side of the L-shaped construction extends less than a substantial majority of the length of the module card such that a substantial portion of the rear end of the module card is exposed, the exposed substantial portion extending from a top edge of the module card to a bottom edge of the module card.

2. (Original) The module of claim 1, further including a securing arrangement for securing the module to a patch panel chassis, the securing arrangement including at least a first flexible tab.

3. **(Currently Amended)** The module of claim 1, wherein the face plate of the L-shaped construction is ~~defined by the face plate and a housing side, the face plate being~~ oriented generally perpendicular to the module card and the housing side ~~being~~ is oriented generally parallel to the module card.

4. (Original) The module of claim 3, wherein the housing further includes a handle extending outward from the housing side.



9. (Original) The module of claim 8, further including a securing arrangement for securing the module to a patch panel chassis, the securing arrangement including at least a first flexible tab extending from the housing.

10. (Original) The module of claim 8, wherein the housing further includes a handle extending outward from the housing side.

11. (Original) The module of claim 8, further including an aperture formed between the face plate and the housing side for viewing an LED positioned on the module card.

12. (Original) The module of claim 9, wherein the securing arrangement for securing the module to a patch panel chassis further includes a second flexible tab extending from the housing.

13. **(Currently Amended)** A method of assembling a patch panel module, the method comprising the steps of:

a) providing a one-piece housing having a generally L-shaped construction and a module card having a length extending between a front end and a rear end, the one-piece housing including a face plate with a front opening, the module card including a front connector and a rear connector;

b) orienting the module card in relation to the housing such that a flexible latch formed on the housing is positioned adjacent to a hole formed in the card; and

c) pressing the module card and housing toward one another to interconnect housing and the card in relation to one another, including flexing the latch until the latch snap-fits within the hole of the card;

d) wherein the housing extends less than a substantial majority of the length of the module card such that a substantial portion of the rear end of the module card is exposed when the module card is interconnected to the housing, the exposed substantial portion extending from a top edge of the module card to a bottom edge of the module card.

14. (Original) The method of claim 13, wherein the step of orienting the module card includes positioning the front connector of the module card adjacent to the front opening of the housing.

15. (Previously Presented) The method of claim 13, wherein the step of providing the one-piece housing includes providing a housing side oriented generally perpendicular to the face plate.

16. (Previously Presented) The method of claim 15, wherein the step of orienting the module card includes orienting the module card in relation to the housing such that the flexible latch formed on the housing side of the housing is positioned adjacent to the hole formed in the card.

17. (Previously Presented) The method of claim 13, wherein the step of providing the one-piece housing includes providing a one-piece molded housing.

18. (Previously Presented) The module of claim 1, wherein the one-piece housing is a one-piece molded housing.

19. (Previously Presented) The module of claim 8, wherein the housing is a one-piece housing, including the face plate and the housing side.

REMARKS

The Office Action mailed November 14, 2007 has been received and the Examiner's comments carefully reviewed. Claims 1, 3, 8 and 13 have been amended. No new subject matter has been added. Claims 1-19 are currently pending. Applicants respectfully submit that the pending claims are in condition for allowance.

Support for the amendments to claims 1, 8, and 13 is found in the specification, for example, in FIGS. 1, 5, 7-17 and 20, which each depict the limitations added.

Finality of Office Action Premature

The Office Action Summary of November 14, 2007 indicates that the Office Action is FINAL. Applicants respectfully submit that the finality of the last Office Action is premature.

In particular, any subsequent action on the merits of an application cannot be made final if it includes a new ground of rejection that is neither necessitated by the Applicants' amendment of the claims nor based on art cited in an Information Disclosure Statement. M.P.E.P. 706.07(a). The Examiner introduced new grounds for rejections based upon the newly cited art of Benda et al. (U.S. Patent 6,241,562), Campbell et al. (U.S. Patent 7,187,555), Richard (U.S. Patent 4,441,140), Ross (U.S. Patent 6,570,770), and Wong (U.S. Patent 6,028,771). Combinations of the aforementioned newly cited art were used as a basis to reject claims 1-12, 14-15, and 17-19. None of claims 1-12, 14-15, and 17-19 were amended in the prior Amendment; and the newly cited art was not submitted by Applicants in an Information Disclosure Statement.

Applicants therefore respectfully submit that finality of the Office Action of November 14, 2007 is premature, and request withdrawal of the finality.

Rejections Under 35 U.S.C. §103

I. Claims 1-3 and 6 are rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) in view of Campbell et al. (U.S. 7,187,555). Applicants respectfully traverse this rejection, but have amended claim 1 to advance this application to allowance.

The claimed invention relates to a module having an interchangeable card. The housing of the module is designed to accommodate the interchangeability. Claim 1 has been amended to recite structural limitations that promote this interchangeable feature by way of a smaller, light-weight housing. The smaller, light-weight housing is easy to handle, provides access to the snap-fit securing arrangement, and further reduces manufacturing costs associated with larger, bulkier prior art housing constructions.

In particular, claim 1 recites a module including a one-piece housing having a generally L-shaped construction. The L-shaped construction is defined by a face plate and a housing side. A module card is attached to the one-piece housing. The housing side of the one-piece housing extends less than a substantial majority of the length of the module card such that a substantial portion of the rear end of the module card is exposed. The exposed substantial portion of the rear end of the module card extends between a top edge of the module card and a bottom edge.

Benda teaches a two-piece housing 20, 30 designed to completely enclose a printed circuit board 200. Each of the housing pieces 20, 30 extends along the entire length of the printed circuit board 200. Campbell does not make up for the deficiencies of Benda, as Campbell similarly teaches an enclosure 108 that extends along a substantial majority of the length of a circuit board 108. Neither reference teaches or suggests a housing construction having a side that extends less than a substantial majority of the length of a module card such that a substantial portion of the rear end of the module card is exposed.

At least for this reason, Applicants respectfully submit that independent claim 1, and dependent claims 2-3 and 6 are patentable.

II. Claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) and further in view of Richard (U.S. Patent 4,441,140). Claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) and further in view of Ross et al. (U.S. Patent 6,570,770). Claims 7 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) and further in view of Wong et al. (U.S. Patent 6,028,771). Applicants respectfully traverse these rejections.

Claim 4-5, 7, and 18 depend upon claim 1. In light of the above comments regarding independent claim 1, Applicants respectfully submit that dependent claims 4-5, 7, and 18 are patentable.

III. Claims 8-9 and 12-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) in view of Wong et al. (U.S. Patent 6,028,771). Applicants respectfully traverse this rejection, but have amended claims 8 and 13 to advance this application to allowance.

A. Claims 8-9 and 12

Claim 8 has been amended to incorporate the interchangeable feature described above with respect to claim 1. In particular, claim 8 now recites a module including a housing having a face plate and a housing side. A module card is secured to the housing. The housing side has a length that extends less than a substantial majority of a length defined by front and rear ends of the module card such that a substantial portion of the rear end of the module card is exposed.

Benda teaches a two-piece housing 20, 30 designed to completely enclose a printed circuit board 200. Each of the housing pieces 20, 30 extends along the entire length of the printed circuit board 200. Wong does not make up for the deficiencies of Benda, as Wong similarly teaches a cover 12 that extends along the entire length of a printed circuit board subassembly 14. Neither reference teaches or suggests a housing construction having a side that extends less than a substantial majority of the length of a module card such that a substantial portion of the rear end of the module card is exposed.

B. Claims 13-17

Claim 13 similarly recites a method including the provision of a housing and a module card, wherein the housing extends less than a substantial majority of the length of the module card such that a substantial portion of the rear end of the module card is exposed when the module card is interconnected to the housing.

Benda teaches a two-piece housing 20, 30 designed to completely enclose a printed circuit board 200. Each of the housing pieces 20, 30 extends along the entire length of the

printed circuit board 200. Wong does not make up for the deficiencies of Benda, as Wong similarly teaches a cover 12 that extends along the entire length of a printed circuit board subassembly 14. Neither reference teaches or suggests a housing that extends less than a substantial majority of the length of a module card such that a substantial portion of a rear end of the module card is exposed.

At least for the above reason, Applicants respectfully submit that independent claims 8 and 13, and dependent claims 9, 12, and 14-17 are patentable.

IV. Claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) and further in view of Wong et al. (U.S. Patent 6,028,771). Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. (U.S. Patent 6,241,562) and further in view of Ross et al. (U.S. Patent 6,570,770). Claim 19 is rejected under 35 U.S.C. §103(a) as being unpatentable over Benda et al. and further in view of Campbell et al. (U.S. Patent 7,187,555). Applicants respectfully traverse these rejections.

Claims 10-11 and 19 depend upon claim 8. In light of the above comments regarding independent claim 8, Applicants respectfully submit that dependent claims 10-11 and 19 are patentable.

SUMMARY

It is respectfully submitted that each of the presently pending claims (claims 1-19) is in condition for allowance and notification to that effect is requested. The Examiner is invited to contact Applicants' representative at the below-listed telephone number if it is believed that prosecution of this application may be assisted thereby.

Although certain arguments regarding patentability are set forth herein, there may be other arguments and reasons why the claimed invention is patentably distinct. Applicants reserve the right to raise these arguments in the future.

Respectfully submitted,

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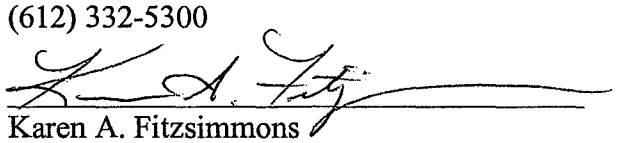
Date: January 14, 2008



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